The proposed facility incorporates the following preventative measures. First, a groundwater underdrain system will be installed to collect and convey down gradient all seepage beneath the structure. Second, an impervious clay liner will be installed to separate the groundwater underdrain system from the coal refuse. The liner will be three feet thick minimum and compacted to permeability of E-07 or less. Along the valley bottom, the liner will be graded to slope down the valley at existing grades to allow for leachate collection. Third the leachate collection drain will be installed on top of the liner's surface to convey leachate, if any to the toe of the structure where it will drain to a clay lined ponds for possible treatment. Fourth the coal refuse will be compacted to reduce oxidation of the acid producing constituents, mainly pyritic sulphur, and seepage through the refuse material. Fifth, an impervious clay cap will be installed to prevent surface water from migrating into and through the refuse full, thereby elimination or reducing the chance for leachate generation.The surface will be graded to promote immediate drainage. Water will not pond or accumulate on the reclaimed surface.

The impact to wildlife during operations will be minimized as much as possible by limiting the amount of disturbed acreage. The construction of sediment ponds and creation of temporary brush piles throughout the fill process will provide temporary habitat for wildlife and aquatic life. Piney Creek, downstream of the project, will continue to provide a natural habitat for wildlife while the site is operational. Tree lines along the undisturbed sections of the permit area will provide travel lanes and cover for wildlife. Upon final reclamation the seeded areas will provide a good mixture of open areas for food and the natural undisturbed woods and brush lands for cover to promote the successful return of wildlife to the area.

Minimal Degradation Alternative

Water quality impacts will be mitigated through proper execution of construction, operations maintenance water monitoring and reclamation.

Diversion ditches will be installed to direct runoff from the coarse coal refuse area. Runoff entering the refuse pile and leachate, if any, may be high in iron and low in pH. This drainage will be directed to sediment ponds for treatment, if necessary. If the water meets the NPDES effluent limitations, it will be released to the receiving stream, Piney Creek.

Long-term impacts will be mitigated through the implementation of the reclamation plan.

The proposed facility incorporates the following preventative measures. First, an impervious clay liner will be installed in the refuse pits. The liner will be three feet thick minimum and compacted to permeability of E-07 or less. Second, leachate, if any, will be collected in channels that drain into sediment ponds for treatment, if required. Third, the coal refuse will be compacted to reduce oxidation of the acid producing constituents, mainly pyritic sulphur, and seepage through the refuse material. Fourth, an impervious clay cap will be installed to prevent surface water from migrating into and through the refuse full, thereby elimination or reducing the chance for leachate generation.The surface will be graded to promote immediate drainage. Water will not pond or accumulate on the reclaimed surface.

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